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## RESEARCH REPORT

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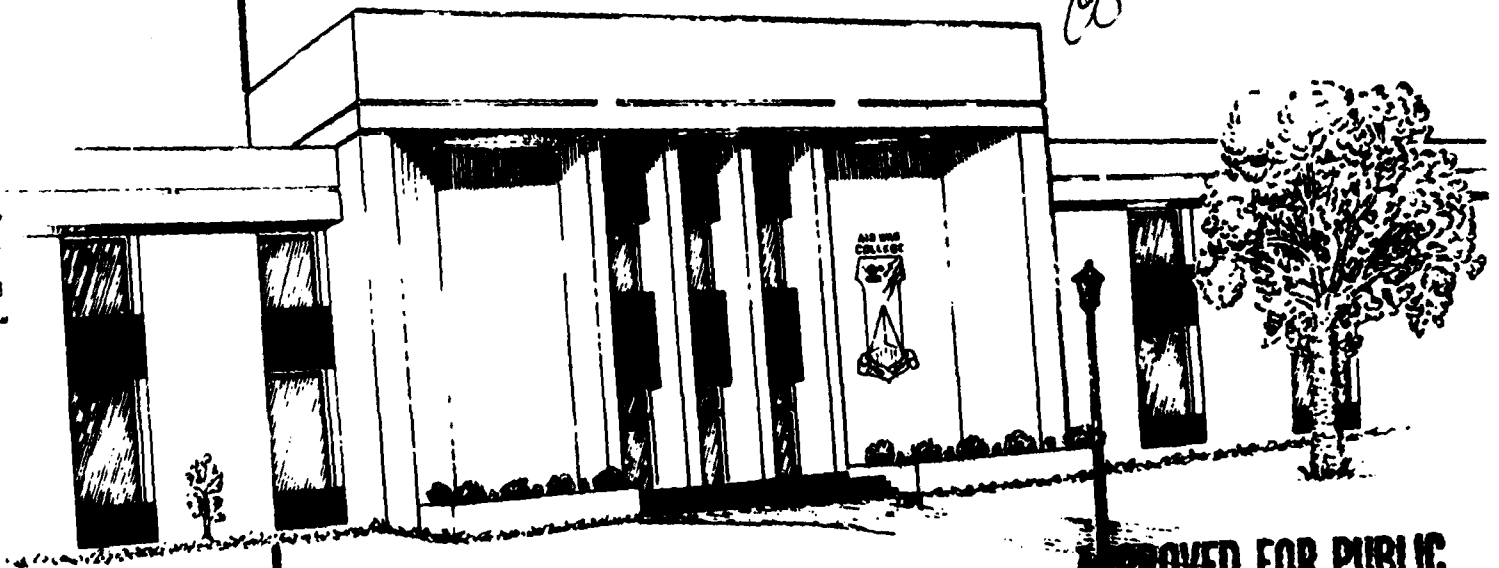
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NORTH ATLANTIC TREATY ORGANIZATION'S COLLECTIVE DEFENSE  
EFFORT: THE BURDENSARING CONTROVERSY

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NORTH ATLANTIC TREATY ORGANIZATION'S COLLECTIVE DEFENSE  
EFFORT: THE BURDENSARING CONTROVERSY

by

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A DEFENSE ANALYTICAL STUDY SUBMITTED TO THE FACULTY  
IN  
FULFILLMENT OF THE CURRICULUM  
REQUIREMENT

Advisor: Lieutenant Colonel Rodney M. Payne

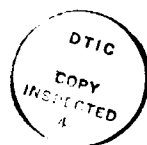
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## EXECUTIVE SUMMARY

TITLE: North Atlantic Treaty Organization's Collective  
Defense Effort: The Burdensharing Controversy

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The paper is an analytical study of an issue which could severely disturb the cohesion of NATO. Burdensharing can be regarded as one of the fundamental principles of an alliance consisting of sovereign states. The members of NATO repeatedly declared their willingness to share the risks, costs, and responsibilities as well as the benefits of the common defense. In the U.S. many people believe that the European Allies share an insufficient part of the common defense burden. In fact, this perception is true if burdensharing would be only a matter of comparing financial contributions. However there are several other factors which are also analyzed and assessed. Despite the current controversy it should be emphasized that the basic common interest of NATO to counter the Warsaw Pact's military threat has not changed. The security and prosperity of Europe and North America still depends--and will depend--on a strong NATO. However, burdensharing is a prerequisite for maintaining solidarity and cohesion within NATO. Therefore, the recommendations offer at least a partial solution of the controversy.

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## BIOGRAPHICAL SKETCH

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## CHAPTER I

### INTRODUCTION

Burdensharing within the North Atlantic Treaty Organization [NATO] is not a new issue. "Like a volcano it smolders continuously." (1:6) It has been discussed as long as the Alliance has existed but with frequently changing intensity. Nearly 40 years ago, when NATO was founded, the European members of the Alliance were exhausted by World War II but the world has changed since then and so has NATO. Today, the situation is different: The Europeans have gained economic strength. The U.S. has increased economic strength too but also has increased global commitments. Additionally, "relative U.S. economic strength vis a vis the rest of the world has declined significantly." (2:2) Another factor is the trade imbalance which reinforces the debate over the question of whether the European allies carry their fair share or not. Defense Secretary Carlucci stated in an interview: "It is fair to ask what each ally is contributing towards what is, after all, our common defense." (3:753) In turn, the Alliance members have repeatedly expressed the willingness to equitably share the burden of the common defense as they did again, for example, in May 1988 in the Final Communique of the Defense Planning Committee's meeting. (4:1)

History teaches that an alliance will only have a



future if the interests of every single ally are sufficiently taken into account. There is a growing feeling in the U.S. that the Europeans allegedly do not pay their fair share. As it is expressed in the U.S. Report of the Defense Burdensharing Panel, "Many Americans feel that we are competing 100 percent militarily with the Soviets and 100 percent economically with our defense allies." (2:2) The Europeans on the other hand pointed out that there are other non-quantifiable contributions besides the quantifiable defense expenditures which have to be regarded in any calculation. Because of the importance of the burdensharing issue, NATO has agreed to commission a review of this issue and all members commonly recognized that this problem has to be worked out "with the spirit of solidarity." (4:1)

The purpose of this paper is to analyze the current burdensharing problems, to assess them, and to develop recommendations which might help to overcome the problems. In order to do this, the threat to NATO will be described first. An analysis of common interests, burdens and benefits which are shared by NATO member countries will follow thereafter. The U.S. perception of the European share will round up the analysis. Then the national versus the common interests, and each country's share will be assessed. Finally, recommendations deducted from the assessment will be shown.

## CHAPTER II

### THE COMMON INTERESTS OF NATO

#### Countering the Threat

The threat posed by Soviet armed forces to Western Europe caused the foundation of NATO in 1949. NATO was born with inferior conventional forces. Therefore, in the early 1950s, a West German contribution to the common defense was discussed. "German manpower was essential for the defense of Europe" and there was no doubt "if the Soviets should attack, it was expected it would be in Germany." (5:63) In 1955, West Germany became a member of NATO but all efforts to keep up with the build-up of Warsaw Pact forces in the following years were in vain. The situation got worse when NATO changed its strategy from Massive Retaliation to Flexible Response because it gave much greater weight to the conventional forces than before. "Repeatedly, NATO commanders, including the SACEUR [Supreme Allied Commander Europe], sounded the alarm in the middle and late 1970s that the West's power of deterrence continued to decline in the face of the continuing modernization of Warsaw Pact forces." (5:151) What is the situation today?

The threat posed by the military potential of the Warsaw Pact continues to exist. NATO reported (6:1) the following comparison of the standing "in-place" forces on 25 November 1988:

|                    | NATO        | Warsaw Pact |
|--------------------|-------------|-------------|
| Tanks              | 16,424      | 51,500      |
| Armored Vehicles   | 4,153       | 22,400      |
| Artillery          | 14,458      | 43,400      |
| Combat Aircraft    | 3,997       | 8,250       |
| Military Personnel | 2.2 million | 3.1 million |

Another threat comes from the Soviet offensive political and military thinking combined with the options the superior armed forces provide. The analysis of force structure, offensive military strategy, and foreign policy of the last four decades leads to the perception "that Soviet power and Soviet strategy is inherently malign and will exploit weakness wherever it can find it." (7:x)

The new leadership under General Secretary Mikhail Gorbachev may change the overall threat posed to NATO in the long run. The series of so called peace initiatives has first of all changed the perception of threat in Western public opinion as a poll conducted by the Mannheim Research Election Group in October 1988 shows. The results were that 83 percent of West Germans regard Gorbachev as a man they can trust; only 66 percent feel that way about their own Chancellor Kohl. (8:3) In spite of this propaganda success, the real threat has not yet changed. The Soviet Union is still able to intimidate other nations by the use of

military power or just the threat of its use. The Soviet Union is still able to influence, if not manipulate, the course of events all over the world. NATO members still have the common interest to counter this threat.

#### Other Common Interests

NATO has existed for almost 40 years. This period of peace and prosperity is founded not only on common defense, but also on common political, ideological, and economical interests.

Politically, NATO has a common interest in "flexible pluralistic democratic governments." (9:4) Its members are accustomed to democratic relations between each other and they respect the sovereignty of the individual countries. As laid down in the preamble of the North Atlantic Treaty they support the principles of the Charter of the United Nations and "they are determined to safeguard the freedom, common heritage and civilization of their peoples, founded on the principles of democracy, individual liberty and the rule of law." (10:13)

Ideologically, the Alliance believes in democratic and pluralistic societies in which human rights are respected. "Those societies honor the dignity and equality of man, protect his rights to freedom of the press and religion, sympathize with his rights to privacy and support his pursuit of happiness and prosperity." (9:4)

Economically, the Alliance supports free enterprise and "limited government intervention in domestic economies and international trade." (9:5)

Another common interest is the fundamental concept of peace preservation and how peace should be shaped. This was laid down in the Harmel Report of the North Atlantic Alliance of 1967 and was confirmed in the Washington Statement of the North Atlantic Council on 31 May 1984. (29:6) This concept is a dual approach to secure peace. The maintenance of adequate military strength and political solidarity is one pillar, and the search for progress towards a more stable relationship between East and West through dialogue and cooperation is the other pillar of NATO's security.

### CHAPTER III

#### THE COMMON BURDEN

##### The Principle of Burdensharing

The principle of burdensharing is that the burden of collective security in the Alliance is a joint responsibility, and must be divided fairly. (29:98) The common burden is what has to be done to enhance the security of NATO but it is not the only aspect of collective security. It has attracted more attention than the overall issue of sharing risks, roles, and responsibilities because "in the real world, leaders and officials are required to justify policies and expenditures to an ever critical electorate." (11:53) The members of the Alliance agree to the principle that everybody has to bear a fair and equitable share of the collective defense efforts. In May 1988, the NATO European Defense Ministers of the Informal Group [EUROGROUP] reaffirmed this principle in their statement on the occasion of EUROGROUP's 20th anniversary. (30:3) The analysis of the extent to which this principle is met shows complex problems because one has to deal with non-quantifiable as well as with quantifiable contributions.

### Roles, Risks and Responsibilities

The North Atlantic Treaty gives the basic framework for roles, risks and responsibilities of the parties. In Article 3, the members of the Alliance have taken over the responsibility to "maintain and develop their ability, both individually and collectively, to resist attack." (10:18) The common risks can be derived from Article 5 in which the signatories agree to the fundamental principle that an armed attack on any one of them is considered as an attack on all. (10:18) As laid down in Article 6, the geographical area in which this principle applies is limited to the territory of the member countries in Europe, North America, Turkey and the islands under their jurisdiction in the North Atlantic area north of the Tropic of Cancer. However, the overall international situation influences the security of the Alliance. Consequently, events threatening to the Alliance which occur outside that area can "be the subject of consultation within the Alliance or of concerted action by individual member countries in that area." (10:18)

Roles and risks, as well as responsibilities within the Alliance, are shared significantly differently because NATO is an alliance of 16 sovereign nations, of which 15 coordinate their defense efforts, 14 participate in the integrated military structure, and 13 contribute forces. Other important factors are the differences in geostrategic

situation, in economical power, in national interests, and in standing forces of the member countries.

### Contributions to the Common Defense

As laid down in Article 3 of the North Atlantic Treaty, the signatories have the responsibility to develop and maintain the ability to resist attack.

In order to analyze and assess the quantifiable and non-quantifiable contributions of each country to the common defense NATO commissioned an Executive Working Group [EWG] in 1988 to review the burdensharing issue. NATO's Defence Planning Committee published the report with the title "Enhancing Alliance Collective Security, Shared Roles, Risks and Responsibilities" in December 1988 which is the basis for the following analysis:

### Money and People

#### Defense Budgets

Money is a significant resource for defense efforts. In the burdensharing context it is the most widely discussed input measure. "It broadly depicts defense input in relation to a country's ability to contribute." (12:10) Subsequently, the percentage of Gross Domestic Product devoted to defense is the most important factor to determine each country's quantifiable input. In NATO, this



input is the baseline reference for the biennial ministerial guidance. The common accepted average of 3 per cent was used in the past to request an increase of defense spending of those countries which were below this percentage. In 1988, the highest outlay was by Greece [6.5 %] followed by the United States [5.81 %] and the lowest were made by Luxembourg [1.13 %] and Canada [2.05 %]. Detailed figures, as well as a comparison of current and constant prices during the past ten years, are contained in Appendix A and B.

In May 1977, the NATO Heads of States and Governments agreed on the Long Term Defense Program [LTDP] which besides others contains the goal for a real increase of each country's defense budget of 3 per cent, annually. Appendix C shows the annual volume of change of the defense expenditures. The review of these figures show that some countries [Canada, Italy, Luxembourg, Norway, Spain, Turkey, United Kingdom, United States] have met the 3 per cent growth; others [Belgium, Denmark, Germany, Greece] have not met the goal. In summary, a downward trend throughout NATO can be analyzed.

#### Personnel

People are also a significant resource for defense efforts. The personnel committed to the armed forces is

another important input measure of each country's contribution to the common defense. To compare the forces of each NATO country, the EWG divided the military personnel into two categories, the active and the reserve forces. The military and civilian personnel assigned for defense tasks were counted together because each country has a different concept of assigning functions to these groups. In 1988, Greece, on top of the list, provided 5.88 per cent of labor force for active duty followed by Turkey with 4.68 per cent. Canada, on the bottom of the list, provided 0.95 per cent. Detailed figures are contained in Appendix D. If the reserve forces are included in the comparison, the performances of some countries are different. Greece still leads the list, if the projections for 1988 are taken, by providing 11.35 per cent of her labor forces and Norway follows with 11.22 per cent. On the lower end of the scale are Luxembourg with 0.82 per cent and Canada with 1.2 per cent. The average in NATO is 3.99 per cent [projection for 1988]. Details are given in Appendix E.

#### Conventional Forces

All the figures above about money and people are only input. They do not indicate quality or fighting power of the troops. However, output is what counts for NATO. It

includes not only those factors such as equipment, training, and readiness but also leadership and morale. NATO has developed standards for conventional forces to measure the output, the so called Allied Command Europe [ACE] Force Goal which is split into the Overall Performance and the Conventional Defence Improvement [CDI]. The Overall Performance is the assessment of how the forces meet NATO standards in regard to quality and quantity. The CDI program identifies and lists critical deficiencies which the countries have to address as a matter of priority. In 1988, Germany achieved the best Overall Performance in implementation of the ACE Force Goal [91%], closely followed by United Kingdom [90%] and United States [89%]. On the lower end of this scale are Luxembourg [28%], Belgium [56%] and Denmark [59%]. A complete picture of Overall and CDI Performance is given in Appendix F.

#### Nuclear Forces

The provision of nuclear forces cannot be compared because only three countries possess nuclear forces [United States, United Kingdom, and France whose forces are not integrated but support overall deterrence]. The United States provide the ultimate strategic nuclear umbrella. However, some countries such as Belgium, Germany, Greece, Italy, the Netherlands, Turkey, and the United Kingdom

share the nuclear burden by being a host nation to US nuclear facilities or by contributing delivery systems for US nuclear warheads.

#### Host Nation Support

Another important input factor is host nation support because it is a prerequisite for NATO's forward defense capabilities. There are a variety of different bilateral and multilateral arrangements which because of their nature cannot be compared. For example, Germany contributes about 90,000 men, 150,000 hectares [1 hectare = 10,000 square meters] of real estate at no charge, and about \$ 46 million per year [operating costs] as a host nation to US forces alone. Italy hosts some 17,000 foreign troops in 43 bases. The Netherlands make 1,300 men [20,000 in time of crisis] available to support reinforcement operations.

#### Common and Joint Funded Activities

Common and joint funded activities are direct provisions of money to support different programs such as the NATO Infrastructure Program, the NATO civil and international military budget, the NATO Airborne Early Warning [NAEW] force, and the NATO Maintenance and Supply Organization [NAMSOC]. The United States, Germany, and the

United Kingdom alone bear about two third of the costs as it is seen in detail in Appendix G.

#### Assistance to Greece, Portugal, and Turkey

Another quantifiable contribution to the collective defense is the assistance to industrially lesser developed countries in NATO such as Greece, Portugal, and Turkey. Ten member countries have provided about \$ 6 billion through 1986. In 1986, the two major contributors, the United States and Germany, paid \$ 1,450 million to assist these countries.

#### Other Defense Contributions

#### Social and Economic Costs: Non-quantifiable Inputs

The hosting of foreign troops as well as the result of their presence, e.g., low level jet flights cause social and economic costs. For example, Germany, in addition to her own troops, hosts 400,000 foreign troops. More than 5,000 military exercises [maneuver damage totalling \$ 22 million] are conducted each year. Some 80,000 low altitude missions [below 1,500 ft.] are flown by jets each year over densely populated areas. These costs are non-quantifiable. John W. Vessey Jr., U.S. Army General and former Chairman of the Joint Chiefs of Staff gave a feeling for that burden

when he tried to explain: "If you multiply the population of Oregon by 20, give each person a car, arm 1 million of them, bring in another half-million foreigners, put 50,000 armored vehicles on the roads and put a couple-thousand jets in the air, then at least the Oregonians would know what the Germans put up with." (17:1397)

The conscription system also requires social and economical costs because citizens have to pay with limitations of their individual freedom and the economy has to live with a reduction in the labor force. On the other side, it saves money in the defense budget because conscripts are cheaper than volunteers. However, there is a political price. Conscription is unpopular, especially if the length of service has to be extended in order to secure the strength of the armed forces in the light of a decreasing availability of young men.

The list of non-quantifiable contributions contains other factors such as geography in terms of proximity to the Warsaw Pact area and in the support of territories which are important to NATO's defense [for example, Greenland and the Faroe Islands supported by Denmark or Berlin supported by Germany]. The list also has to include the large training areas provided mainly by Canada, Germany and Turkey, the specialized training areas in different countries, and the frequent provision of large parts of the

countries by Germany, Norway, Denmark, and Turkey, during major NATO exercises. Civil Emergency Planning [CEP] is also an important contribution to the common defense. Each country pays for CEP but areas such as continuity of government, protection of civil population, provision of merchant ships and civil aviation resources, as well as the amount of money spent for this purpose differ from country to country.

These examples of non-quantifiable contributions show a wide range of differences among the individual countries. The differences constitute an inequity which do not allow a comparison with mathematical precision.

#### Contributions to the Wider Alliance Security

The security of NATO does not depend only on armed forces but also on political, social and economical dimensions. In pursuit of Western security interests, a continuous consultation process takes place at all levels. The progress of the European nations towards more unity within the European Economic Community [EEC] is progress towards more economic and social stability on the part of NATO. It also reinforces the political cohesion of the European NATO countries.

The security interests of the Alliance as a whole or

of individual countries outside of the NATO area [designated in Article 6 of the North Atlantic Treaty] are mainly taken care of by the United States. However, other countries such as the United Kingdom, Germany, Italy, Belgium, the Netherlands, Spain and France provide military training, supplies and cooperation to many countries all over the world [Germany for example cooperates with 64 countries]. Recently, several countries [United States, Italy, Belgium, the Netherlands, United Kingdom] sent naval forces to the Persian Gulf in order to protect NATO's security interests.

NATO countries contribute [money and people] to global stability by actively supporting the United Nations. Another important factor in this regard is foreign aid. Norway pays the highest percentage of the GDP [1.1%] followed closely by the Netherlands [0.98%] whereas Iceland [0.05%] and Spain [0.1%] are on the lower end of the scale. Details are given in Appendix H.



## CHAPTER IV

### THE BENEFITS OF THE COMMON DEFENSE

In March 1988, during a NATO summit, the Heads of State and Government emphasized the basic principle of sharing not only the risks, roles, and responsibilities but also the benefits of the common defense efforts. (13:1)

#### Peace

Peace is the most important benefit of all. The past four decades of peace were the prerequisite for stability, economical growth, trade, and wealth in the NATO area. In the history of modern Europe, it is the longest period of peace and prosperity besides the period between 1815 [Vienna Congress] and 1854 [Crimean War]. As Josef Joffe, a German political scientist mentioned: "For a continent that almost consumed itself in the Thirty Years War between 1914 and 1945, this is an outstanding record." (18:III/8)

#### Economy and Trade

The economies of North America and Western Europe are tightly interconnected and depend on each other. The United States has invested about \$ 125 billion in the countries of the European Community whereas the Europeans have invested about \$ 140 billion in the United States. "The European Community is the largest world market for American exports and vice versa," states the Group of NATO European Defence Ministers [EUROGROUP]. (15:3) However the

level of wealth within the Alliance is quite different as shown in the following comparison of GDP per capita [\$] as of 1984 (16:47):

|         |        |             |        |
|---------|--------|-------------|--------|
| Belgium | 7,800  | Luxembourg  | 12,800 |
| Canada  | 13,360 | Netherlands | 9,500  |
| Denmark | 11,000 | Norway      | 13,750 |
| France  | 8,891  | Portugal    | 1,900  |
| Germany | 9,887  | Spain       | 4,128  |
| Greece  | 3,000  | U.K.        | 7,589  |
| Iceland | 8,700  | U.S.        | 15,146 |
| Italy   | 6,214  |             |        |

In 1984, the total average in NATO was \$ 10,089.

The defense trade statistics show another unbalanced picture. If a five-year period of defense trade between the US and the other NATO countries is analyzed, the figures in billions of US Dollars are as follows (20:6):

| <u>Year</u>       | <u>Purchases by Allies</u> | <u>Purchases by US</u> | <u>Ratio</u> |
|-------------------|----------------------------|------------------------|--------------|
| 1982              | 3.9                        | 1.7                    | 2.2:1        |
| 1983              | 9.8                        | 2.0                    | 4.8:1        |
| 1984              | 8.8                        | 2.1                    | 4.3:1        |
| 1985              | 5.7                        | 2.8                    | 2.0:1        |
| 1986              | 4.5                        | 2.8                    | 1.6:1*       |
| Total/<br>Average | 32.7                       | 11.4                   | 2.9:1        |

\* According to Dennis Kloske, DoD, this ratio could be 2.1:1. (21:23) John G. Ross, congressional editor of the Armed Forces Journal International, mentioned the difficulties in calculating these figures. (21:5)

In the final communique of the Alliance summit held in London in May 1977 the Allies agreed to develop a more balanced relationship in the procurement of defense equipment. (31:11) However, the analysis of only the financial aspect of the problem would be misleading because the balance of payments is not normally "an obstacle of a structural nature" for developed countries. (14:132) The U.S. Department of Defense stated in the Report on Allied Contributions to the Common Defense that "the problem of the impact of defense effort on the foreign exchange position has to be examined in the context of its overall external finances, i.e., taking account of the strength of its balance of payments and of its gold and foreign exchange reserves." (14:132)

The key to the problem is science and technology. Today the European countries have a capable arms industry. The development of weapons and equipment as well as collaboration in armament projects are dependent on a high technological standard in the industry. This standard will be at risk if the Europeans would not be able to keep or increase their technological know-how in arms production. Improving the European arms industry will enable the European NATO member to assume a larger share of the common defense burden. (19:136)

## CHAPTER V

### THE US PERCEPTION OF THE EUROPEAN SHARE

#### Historic Development

The burdensharing issue has its roots in history. When NATO was founded in 1949, the European signatory countries had not recovered from World War II. Twelve countries signed the treaty but only seven had participated in the preparatory detailed negotiations which had been remarkably short [one year] in view of the importance of the matter. (7:64) At that time, the European political leaders were "concerned with the survival of their nations." (5:7) Additionally, the national security interests of United States, Great Britain and France were different. The United States was interested in a stable European pillar of the Alliance and provided military protection and financial aid through the Marshall Plan in order to secure peace and to develop future markets for its own economy. France saw the first priority as limiting the power of Germany. Great Britain's interest in defending the European continent was much less than her interests in the Commonwealth. (22:7-8) Therefore, the United States had to bear the main burden of the common defense to protect Europe against Communist expansion.

#### Voices of the U.S. Congress

When the European countries began to recover

economically some people in the U.S. began to doubt that the Europeans would take over an appropriate share of the defense responsibility. In this light, the discussion of a withdrawal of American troops from Europe was born. By several amendments, between 1966 and 1972, Senator Mike Mansfield requested troop reductions in Europe. He was part of a minority. The majority was unambiguously committed to NATO. However, in 1967, 35,000 men were redeployed to the United States. Money and politics played a role: money, because of the increasing costs of the war in Vietnam and politics, because the Defense Department hoped the limited troop withdrawal "would deter Mansfield from his campaign." (17:1394)

The number of people, who think that time has come for the Europeans to substantially increase their defense efforts or even to assume responsibility for their own defense, has increased over the years and has influenced legislation. In 1984, the Nunn-Roth Amendment called for U.S. troop reductions in Europe of up to one third after 1987 if the Europeans did not meet NATO's three per cent goal of increase in defense spending. (23:10) The amendment failed with a proportion of votes of 41 to 55. (17:1395) Since then, the public debate has been focused increasingly on economic issues. It reached a cumulative point in 1988 when a Congressional report stated that "concerns about the

Federal deficit, the trade imbalance, high Federal spending generally and high defense spending specifically have ignited a national debate about our future defense needs and a reassessment of U.S. global military commitments."

(2:6) The public in the U.S. knows that the economic world has changed and that the Europeans today are one of the important competitors on the world market. In general, there is a feeling of unequally shared burden in NATO resulting in the basic question, "why does a democratic and increasingly unified Europe with a greater combined gross national product and population than the United States still look to the United States for such a large contribution for its territorial defense?" (2:2)

#### Voices of the U.S. Government

Representatives of the U.S. Government assessed the burdensharing issue less critically than the public. In April 1988, the Secretary of Defense submitted his 1988 Report on Allied Contributions to the Common Defense. In this report he concluded that besides remarkably different performances the "allies continue to make a substantial contribution to the common defense -- considerably more than they are often given credit for." (14:1) On 18 June 1988, U.S. President Ronald Reagan asserted in an interview with a German newspaper that the NATO European members are contributing their fair share toward the Alliance defense

burden. (24) The U.S. Permanent Representative to NATO, Alton G. Keel Jr., stated in October 1988, that "the discussion of burdensharing has been relatively constant throughout NATO's 40-year history" and that "it [the issue] is periodically discovered by pundits as a new crisis for NATO." (25:4)

However, the U.S. domestic situation has changed. The combination of the budget constraints with the fact that the Allies perform remarkably different, as stated by the Secretary of Defense, will cause a further increase in pressure on the U.S. Government to seek a solution to the burdensharing problems.

## CHAPTER VI

### ASSESSMENT

#### Common and National Interests

The binding force which holds NATO together is the Communist threat. Despite the new thinking in the Soviet Union and despite Gorbachev's peace initiatives, the Warsaw Pact will remain militarily powerful. The most important common interest of NATO is to counter this threat. However, the U.S. and the European Allies have divergent views of how to handle this threat politically because the Europeans have regional interests. They are condemned to live as neighbors with the Soviets, and above all they feel common cultural roots with the East. The Europeans depend on detente. On the contrary, the U.S. has global interests, and views NATO as an instrument to geopolitically contain the Soviet Union. (26:61) The different interests continue as a source of frequent discord in the Alliance.

There are also different opinions about the question, how large a force is enough for NATO. It is commonly accepted that the threat should determine defense efforts. However, there is a gap between the military analysis and the political willingness to provide the necessary budget. An important reason for that is the difficulty in determining exactly the forces necessary to deter or resist an attack. For example, in 1952 during the



meeting of the North Atlantic Council in Lisbon, the so called Lisbon force goals of 50 combat-ready divisions and 4,000 combat aircraft were established. (11:12) NATO has never reached that force goal. NATO remains concerned about the "severe disadvantage on the ground" because "ground forces are the only type of forces that can seize and hold territory." (27:110) Experts of the International Institute of Strategic Studies conclude "that general military aggression in Europe would be a high-risk option with unpredictable consequences." (28:235) Therefore, the problems of force comparison make it extremely difficult to evaluate the exact state of an East/West force balance, and complicate the discussion in NATO about an increase of defense efforts.

NATO member countries share common political, ideological and economical interests. However, individual national interests still play an important role. For examples, the United States has global interests whereas the European countries focus their interests not only on the EEC but also on their own national interests. The United Kingdom keeps its ties with the Commonwealth. France is linked to its former colonies, and West Germany has a special trade relationship with East Germany. These national interests are also subject to change. One important example is the growing U.S. interest in the

Pacific region which replaced the EEC as its largest trading partner in the early eighties. In 1986 Japan alone achieved a surplus in trade with the U.S. of \$ 55 billion. On the other side, West Germany achieved only \$ 15 billion which was the same as Taiwan's surplus with the U.S..

#### The Reality of Burdensharing

In the 1988 Report on Allied Contributions to the Common Defense, the U.S. Secretary of Defense admitted that "there is no universally accepted formula for calculating each country's fair share." (14:1) It seems to be easy to count and compare the percentage of GDP assigned to the defense budget but this would neglect the consideration of the output. Another solution, to compare the output, seems reasonable because "what counts in the end is the way in which money is transformed into troops in the field - fully equipped, trained, and ready to fight." (11:18) However, this would neglect all the important non-quantifiable contributions which are also crucial for NATO's security. The only way to assess each country's share is to look at the whole spectrum of security efforts. This method provides at least a vast comparison of the overall contributions. NATO's DPC saw itself confronted with exactly those difficulties. In the final conclusion of its latest report (12:75) it stated:

Precise comparisons of one type of contribution with another are not possible....The differences between some individual national contributions are

glaring....While no one indicator can be used to draw conclusions concerning the equity of the sharing arrangement, seen together the group of indicators does provide an indication of overall level of effort by individual Allies.

Based on this report (12:47-57) and the foregoing analysis, the contributions of the member countries can be assessed as follows:

#### Belgium

Belgium's defense spending is about average. However, she shows the lowest capital investment rate among the industrially developed countries. Therefore, her forces can hardly achieve their operational requirements as indicated by the 1988 performance figures in Annex F. Her contributions to the common defense include the NATO headquarters in Evere and Mons [SHAPE] as well as important ports for overseas reinforcements.

#### Canada

Canada's input is, in respect to her wealth, on the lower end of the scale. However, the three per cent goal of increase has been met and further improvements are planned. Canada, like Belgium, has based her forces outside her own territory, pays one of the highest parts of NATO's infrastructure program, and participates significantly in foreign aid and United Nations peacekeeping programs.

#### Denmark

Denmark's input is one of the lowest in NATO with a

constant decrease since 1981. She does not share the nuclear risk of stationing nuclear weapons on her territory. On the other hand, Denmark supports Greenland and the Faroe Islands. She also contributes significantly to foreign aid and the United Nations, financially as well as militarily.

#### Germany

Germany's percentage of GDP input is average with a declining tendency. The three per cent increase goal has not been met in recent years. Her output however, is substantial. The German forces are of a high operational value and show the highest overall implementation of the 1988 ACE goals. In fact, they "provide the core of NATO's conventional defence in the Central Region and make a substantial contribution to the defence of the Northern Region and NATO's maritime posture." (12:49) Germany also carries a heavy burden because of the troop concentration on her territory, the host nation support, and the financial support of West Berlin.

#### Greece

Greece invests a top level input of money and people in respect to her weak industrial basis. The largest part of NATO's merchant ships are under her flag.

#### Iceland

Iceland provides territory for U.S. military forces

and pays for NATO programs as well as for foreign aid.

#### Italy

Italy's input percentage is below average, but the annual increase rate is within NATO's goal thus enabling Italy to improve slowly in the defense efforts. She will provide territory for the U.S. 401st Tactical Fighter Wing redeploying from Spain. She already hosts foreign troops in 43 bases.

#### Luxembourg

Luxembourg's defense input is on the lower end of the scale as shown in Annex A. However, she has achieved one of the highest growth rates in defense expenditure of all NATO members for the last ten years.

#### The Netherlands

The input efforts are average. However, important improvements in output have been made through substantial force modernization programs. The annual growth rate of defense spending is stable at two per cent.

#### Norway

Norway's input in terms of money is average but it shows a high growth rate. The shortcomings which still exist in the armed forces require more investments within the next few years.

#### Portugal

Despite the weak industrial basis, the amount of

input is average. The progress of force modernization is slow and requires assistance by other nations. Portugal provides training areas for her allies.

#### Spain

Spain's input in terms of money is below average. However the annual growth rate is one of the highest in NATO. The shortcomings which still exist in her armed forces require further substantial investments. Spain provides important bases for U.S. forces.

#### Turkey

Despite a weak industrial basis, Turkey's investments in defense are one of the highest in NATO. This also applies for the annual growth rate. The force modernization programs require the assistance of other allies such as the U.S., Germany, and the Netherlands. Turkey also contributes training areas for her allies.

#### United Kingdom

The United Kingdom is a major contributor to the common defense. The percentage of GDP devoted to defense is the third highest after the U.S. and Greece. The output is of significant value because the forces achieved the highest CDI performance and the second highest overall implementation of ACE force goals in 1988. The U.K. provides conventional as well as nuclear [strategic and theater] forces and takes considerable efforts to keep them modernized.

### United States

The United States is the largest contributor to the common defense. The growth rate in defense spending from 1980 to 1986 was the highest of the Alliance enabling the U.S. to modernize her forces to a high standard. The CDI performance as well as the implementation of the ACE force goal was one of the best in NATO in 1988. The U.S. pays the largest part of NATO's infrastructure program and the largest part of military assistance to the lesser developed countries. She provides the ultimate nuclear protection for the Alliance. The U.S. carries the largest burden of securing the worldwide interests of the West.

### Summarized Assessment

The biggest problem in assessing each country's contribution to the common defense is the lack of defined and commonly accepted parameters which would allow one to clearly identify strengths and weaknesses. NATO's DPC took a first step in 1988 to assess each country's contribution on a wider scale. The DPC stated that "the range of contributions include financial and human resources, land and facilities, services and sacrifices, cooperation and solidarity." (12:75) Subsequently, conclusions concerning the equity of burdensharing cannot be drawn simply from comparing figures. Many of the contributions are

non-quantifiable, and can be seen only in the context of the collective security. However, the DPC mentioned that "the group of indicators seen together does provide an indication of overall level of effort by individual Allies." (12:75)

An equitable fair share does not only include roles, risks and responsibilities but also benefits. Above all, the Alliance enjoys peace and prosperity. The range of benefits also include trade surplus, slices from common funded activities, and in the case of Greece, Turkey, and Portugal, financial aid. Exact measurements of benefits do not exist. Therefore, the analysis and the assessment of the benefits is as complex and difficult as the one of the burden.

The discussion in the U.S. about the burdensharing issue is, with the exception of the U.S. Government, reduced to a discussion about the Allies' quantifiable contributions to the collective defense. However, even the quantity of the European share is considerable: Europe \*) provides 95 per cent of NATO's divisions, 90 per cent of the manpower, 90 per cent of the artillery, 80 per cent of the tanks, 80 per cent of the combat aircraft, and 65 per cent of the major warships. (15:10)

\*) The figures are related to peacetime in-place forces. They do not include the U.S. forward-stored equipment, their units assigned for rapid reinforcement, and U.S. NATO-oriented active and reserve forces. (32:75)



## CHAPTER VII

### RECOMMENDATIONS

The burdensharing controversy is a result of the fact that democracies request justification on defense expenditures and that the perception of unequally divided burden exists. The defense budget is each country's burden and it demands public support. Therefore, recommendations should cover two objectives. On one side they should lead to a reinforcement of the public support and on the other hand they should reduce existing imbalances in the collective defense efforts.

#### Development of a New Concept

First, NATO has to develop a comprehensive concept of defense and arms control which takes into account the political changes that have occurred between East and West. The European public increasingly doubts that NATO has the appropriate answers for Gorbachev's peace initiatives. NATO has to counter the virus of decreasing public support. The increase and maintenance of the public support for defense is a fundamental issue. The public needs to be sure that NATO has a concept which is based on a detailed analysis and on consensus among its members. A comprehensive concept which clearly indicates the need to maintain a strong deterrence is a prerequisite to any shift in burden. It could show also a way out of the current controversy about the modernization of the Short Range Ballistic Missiles.

### Improvement of the Assessment

The instruments used to assess each country's contributions to the common defense need further improvement. A standing working group should consider ways of improving both input and output measurement. The DPC should publish an annual report on burdensharing in order to influence the priority setting of each country in regard to future force goals. The annual report should emphasize the weaknesses which are directly related to insufficient funding. It should analyze the follow-up actions on previously pointed out weaknesses. However, it is acknowledged that such an annual report might not get the agreement of all member countries because some will not find it politically feasible to be blamed annually of not doing enough for the common defense. On the other side, an established assessment procedure would underline the willingness of all member countries to solve the burdensharing problems.

### Rationalizing

NATO has to examine if there are ways to make more effective use of the budgetary funds. More economic advantages could be achieved by increasing the number of collaborative projects, i.e., development and production of weapon systems, and common logistics and training. The barriers with regard to technology transfer should be

lowered in cases where they hamper cooperation and standardization. However, interchange of technical and scientific know-how is a sensitive matter which depends on the political will, the military and the economic goals of the member countries. Technology protection and cost compensation must be prerequisites of any technology transfer.

The Europeans should make more efforts to develop and to acquire weapon systems which are optimized for the potential European battlefield. The objectives should be affordable technology, low active manpower, and no world-wide operable expensive "silver bullets".

Lesser developed countries which do not have a competitive modern arms industry should be given a common funded compensation for the drain of foreign currency in order to ease the procurement of foreign military equipment.

The United States, United Kingdom, and France should coordinate their development, procurement, and deployment of nuclear weapons in order to make more effective use of their budgetary funds. The conventional forces of France and the United Kingdom are relatively small because of their ambitious national nuclear efforts. They could be enlarged if the costs of the national nuclear programs were reduced. However, in this case the common interests of the

nuclear powers must come before national interests. In addition, France should be encouraged to participate more in NATO's military structure in order to reinforce the Alliance. France's recent decision to join NATO's Air Command and Control System is a step in that direction.

#### Improvement of Public Support

Some countries, Germany primarily, have to improve the acceptance of the requirement for security by the public. It takes a combined effort from government to the media, to stop the downward trend. The current tendency of questioning the need for continuing defense efforts poses a threat to Western security. The U.S. request for Germany to carry a greater part of the burden than in the past does not find any public support in a country where the Defense Minister was forced to reduce the maneuver activities by 50 per cent and finds himself constantly under public pressure because of the intensity of low level training flights. In this light, continuing U.S. pressure could reinforce anti-American tendencies. Therefore, it is highly important to keep the public discussion under control and to seek solutions to the burdensharing issues at the expert level within NATO.

## CHAPTER VIII

### CONCLUSIONS

Burdensharing is a legitimate issue which is as old as NATO. This does not mean that the problems should be neglected. The controversy has become more weighty because conditions have changed. Today the combined Gross National Product of the European NATO countries and the total population exceeds those of the United States. But in terms of money, the United States contributes more for the common defense than all the other NATO members together. However, critics should realize that the sole comparison of defense expenditures is drawing the attention from the more important absolute accomplishments for the common defense. The European allies carry their burden. Indeed, some could do better, but the combined contributions are essential for NATO. Critics should also recognize that a shift in burdensharing from the U.S. to the Europeans would result in a shift of powersharing.

The criticism in the U.S. continues as if NATO had never tried to solve the imbalances. The Alliance exists because of common interests. There is still no alternative. The U.S. ambassador to NATO put it best when he wrote: "there is no cheaper alternative to defending America."

(25:5)

NATO has been successful in securing the peace since

1949. NATO also has survived internal tensions before. It would be a tragedy to allow the burdensharing controversy to become a dividing factor within the Alliance. The secret of NATO's success has been the solidarity of its members. This solidarity will overcome the current controversy.

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Defense Expenditures as % of GDP  
(based on current prices)

| Country        | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | Average<br>78-87 | Average<br>83-87 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------------------|------------------|
| Belgium        | 3.34 | 3.34 | 3.35 | 3.52 | 3.40 | 3.32 | 3.15 | 3.05 | 3.03 | 2.99 | 2.87 | 3.25             | 3.11             |
| Canada         | 1.94 | 1.83 | 1.88 | 1.91 | 2.10 | 2.19 | 2.21 | 2.17 | 2.17 | 2.13 | 2.08 | 2.05             | 2.17             |
| Denmark        | 2.41 | 2.32 | 2.44 | 2.53 | 2.51 | 2.45 | 2.31 | 2.15 | 2.00 | 2.11 | 2.17 | 2.32             | 2.20             |
| Germany        | 3.35 | 3.26 | 3.28 | 3.39 | 3.39 | 3.37 | 3.26 | 3.20 | 3.10 | 3.05 | 2.98 | 3.26             | 3.20             |
| Greece         | 6.70 | 6.28 | 5.67 | 6.97 | 6.85 | 6.28 | 7.15 | 6.97 | 6.11 | 6.15 | 6.59 | 6.50             | 6.52             |
| Italy          | 2.07 | 2.08 | 2.10 | 2.11 | 2.26 | 2.28 | 2.28 | 2.31 | 2.24 | 2.44 | 2.39 | 2.21             | 2.31             |
| Luxembourg     | 1.03 | 1.02 | 1.15 | 1.21 | 1.19 | 1.20 | 1.15 | 1.09 | 1.08 | 1.21 | 1.27 | 1.13             | 1.15             |
| Netherlands    | 3.08 | 3.20 | 3.11 | 3.20 | 3.23 | 3.19 | 3.19 | 3.10 | 3.05 | 3.05 | 2.99 | 3.14             | 3.11             |
| Norway         | 3.22 | 3.08 | 2.89 | 2.89 | 3.02 | 3.08 | 2.80 | 3.08 | 3.11 | 3.36 | 3.28 | 3.05             | 3.08             |
| Portugal       | 3.47 | 3.46 | 3.46 | 3.46 | 3.45 | 3.34 | 3.28 | 3.16 | 3.20 | 3.11 | 3.13 | 3.34             | 3.22             |
| Spain          | 2.03 | 2.13 | 2.30 | 2.36 | 2.38 | 2.43 | 2.37 | 2.42 | 2.24 | 2.40 | 2.20 | 2.31             | 2.37             |
| Turkey         | 5.43 | 4.55 | 4.58 | 5.11 | 5.13 | 4.82 | 4.37 | 4.44 | 4.77 | 4.44 | 4.37 | 4.75             | 4.56             |
| United Kingdom | 4.61 | 4.85 | 5.02 | 5.14 | 5.39 | 5.28 | 5.49 | 5.23 | 4.99 | 4.73 | 4.48 | 5.07             | 5.14             |
| United States  | 4.80 | 4.80 | 5.14 | 5.40 | 6.09 | 6.37 | 6.22 | 6.52 | 6.72 | 6.50 | 6.07 | 5.81             | 6.46             |

Source: Report by NATO's Defense Planning Committee,  
December 1988, page 12.

Appendix B

Defense Expenditures as % of GDP  
(based on constant prices)

| Country        | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | Average<br>78-87 | Average<br>83-87 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------------------|------------------|
| Belgium        | 3.43 | 3.43 | 3.35 | 3.43 | 3.37 | 3.36 | 3.24 | 3.20 | 3.27 | 3.24 | 3.10 | 3.33             | 3.26             |
| Canada         | 1.90 | 1.82 | 1.88 | 1.91 | 2.10 | 2.19 | 2.21 | 2.17 | 2.17 | 2.13 | 2.08 | 2.04             | 2.17             |
| Denmark        | 2.49 | 2.41 | 2.44 | 2.47 | 2.40 | 2.36 | 2.23 | 2.16 | 2.08 | 2.15 | 2.22 | 2.32             | 2.20             |
| Germany        | 3.35 | 3.26 | 3.28 | 3.39 | 3.39 | 3.37 | 3.26 | 3.20 | 3.10 | 3.05 | 2.98 | 3.25             | 3.20             |
| Greece         | 6.70 | 6.28 | 5.67 | 6.97 | 6.85 | 6.28 | 7.15 | 6.97 | 6.11 | 6.15 | 6.59 | 6.50             | 6.52             |
| Italy          | 2.13 | 2.08 | 2.10 | 2.07 | 2.13 | 2.17 | 2.15 | 2.16 | 2.12 | 2.18 | 2.10 | 2.13             | 2.16             |
| Luxembourg     | 1.00 | 1.00 | 1.15 | 1.21 | 1.24 | 1.25 | 1.18 | 1.12 | 1.11 | 1.23 | 1.29 | 1.15             | 1.18             |
| Netherlands    | 3.15 | 3.21 | 3.11 | 3.26 | 3.38 | 3.35 | 3.35 | 3.28 | 3.33 | 3.30 | 3.26 | 3.27             | 3.32             |
| Norway         | 3.05 | 2.96 | 2.89 | 2.95 | 3.05 | 3.04 | 2.74 | 2.99 | 2.82 | 3.11 | 3.06 | 2.96             | 2.93             |
| Portugal       | 3.44 | 3.42 | 3.46 | 3.46 | 3.45 | 3.34 | 3.28 | 3.16 | 3.20 | 3.11 | 3.13 | 3.33             | 3.22             |
| Spain          | 2.03 | 2.13 | 2.30 | 2.36 | 2.38 | 2.43 | 2.37 | 2.42 | 2.24 | 2.40 | 2.20 | 2.31             | 2.37             |
| Turkey         | 4.41 | 4.57 | 4.58 | 4.48 | 4.48 | 4.14 | 3.86 | 3.99 | 4.17 | 3.83 | 3.87 | 4.24             | 4.00             |
| United Kingdom | 4.73 | 4.78 | 5.02 | 5.15 | 5.40 | 5.24 | 5.33 | 5.14 | 4.83 | 4.54 | 4.26 | 5.01             | 5.01             |
| United States  | 4.87 | 4.93 | 5.14 | 5.19 | 5.69 | 5.90 | 5.77 | 6.00 | 6.21 | 6.05 | 5.59 | 5.55             | 5.98             |

Source: Report by NATO's Defense Planning Committee,  
September 1980 page 16

Annual Volume of Change of Defense Expenditures (%)

| Country        | 1978  | 1979  | 1980  | 1981  | 1982  | 1983  | 1984  | 1985  | 1986   | 1987  | 1988  | Average<br>78-87 | Average<br>83-87 |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|------------------|------------------|
| Belgium        | 6.65  | 2.17  | 1.94  | 0.89  | -0.11 | -0.42 | -1.31 | 0.13  | 4.50   | 0.85  | -2.64 | 0.95             | 0.49             |
| Canada         | -0.16 | -0.90 | 5.08  | 3.13  | 4.89  | 8.01  | 7.22  | 2.44  | 2.89   | 2.18  | 1.91  | 3.75             | 4.36             |
| Denmark        | 4.12  | 0.25  | 0.66  | 0.56  | -0.27 | 0.81  | -1.12 | 0.91  | -0.33  | 2.25  | 2.86  | 0.30             | -0.02            |
| Germany        | 2.63  | 1.50  | 1.95  | 3.42  | -0.44 | 0.88  | -0.65 | 0.20  | -0.56  | -0.06 | -0.25 | 1.13             | -0.32            |
| Greece         | 1.77  | -2.80 | -8.23 | 23.01 | -1.37 | -7.88 | 16.92 | 0.62  | -11.37 | 0.35  | 10.04 | 1.00             | 4.17             |
| Italy          | 1.43  | 2.63  | 4.90  | -0.50 | 3.13  | 2.48  | 2.81  | 3.00  | 1.03   | 5.82  | -1.06 | 2.62             | 2.89             |
| Luxembourg     | 7.87  | 3.52  | 16.33 | 4.77  | 3.92  | 3.44  | 0.47  | -1.51 | 3.59   | 13.39 | 7.05  | 5.44             | 1.78             |
| Netherlands    | -4.83 | 4.24  | -2.11 | 4.18  | 2.13  | 0.51  | 3.19  | 0.19  | 3.80   | 1.71  | 0.29  | 1.94             | 2.25             |
| Norway         | 7.76  | 1.93  | 1.77  | 2.67  | 4.15  | 3.99  | -4.60 | 15.18 | -1.80  | 10.52 | -1.30 | 2.83             | 3.14             |
| Portugal       | 1.79  | 5.59  | 6.03  | 1.03  | 0.59  | -3.07 | -4.57 | -0.78 | 6.33   | 1.16  | 4.97  | 1.85             | -0.74            |
| Spain          | 2.09  | 4.77  | 9.32  | 2.26  | 1.86  | 4.28  | -0.94 | 4.41  | -4.46  | 12.77 | -4.62 | 3.87             | 1.26             |
| Turkey         | 0.02  | 2.58  | 2.05  | 1.80  | 4.58  | -4.43 | -1.27 | 8.49  | 13.00  | -1.27 | 3.36  | 2.24             | 4.44             |
| United Kingdom | -0.59 | 3.03  | 2.81  | 1.42  | 5.97  | 0.43  | 3.97  | -0.09 | -3.18  | -2.00 | -3.13 | 2.29             | 0.69             |
| United States  | 1.58  | 3.26  | 4.25  | 4.64  | 6.98  | 7.85  | 4.68  | 7.25  | 6.68   | 0.12  | -4.94 | 5.18             | 5.37             |

The averages are calculated by using the method described in DRC/N(85)36, paragraph 11 (b) and appendix 1.

Source: Report by NATO's Defense Planning Committee,  
December 1986, page 15.

Military and Civilian Personnel as % of Labour Force

| Country        | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|
| Belgium        | 2.87 | 2.77 | 2.79 | 2.81 | 2.79 | 2.76 | 2.71 | 2.71 | 2.71 | 2.77 | 2.78 |
| Canada         | 1.10 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 | 0.97 | 0.97 | 0.97 | 0.96 | 0.95 |
| Denmark        | 1.62 | 1.67 | 1.66 | 1.65 | 1.52 | 1.54 | 1.47 | 1.42 | 1.35 | 1.36 | 1.41 |
| Germany        | 2.49 | 2.48 | 2.45 | 2.44 | 2.42 | 2.43 | 2.40 | 2.41 | 2.40 | 2.39 | 2.38 |
| Greece         | 6.46 | 6.40 | 6.11 | 5.78 | 5.75 | 5.24 | 6.01 | 6.06 | 5.89 | 5.90 | 5.88 |
| Italy          | 2.50 | 2.45 | 2.47 | 2.47 | 2.49 | 2.41 | 2.42 | 2.50 | 2.46 | 2.44 | 2.42 |
| Luxembourg     | 0.87 | 0.84 | 0.83 | 0.82 | 0.84 | 0.86 | 0.87 | 0.86 | 0.83 | 0.83 | 0.86 |
| Netherlands    | 2.69 | 2.64 | 2.60 | 2.58 | 2.52 | 2.46 | 2.23 | 2.20 | 2.25 | 2.24 | 2.23 |
| Norway         | 2.66 | 2.64 | 2.59 | 2.50 | 2.59 | 2.57 | 2.47 | 2.28 | 2.32 | 2.29 | 2.28 |
| Portugal       | 2.22 | 2.21 | 2.33 | 2.34 | 2.36 | 2.31 | 2.45 | 2.58 | 2.58 | 2.57 | 2.58 |
| Spain*         | 3.21 | 3.20 | 3.10 | 3.14 | 3.16 | 2.94 | 2.83 | 2.60 | 2.51 | 2.56 | 2.25 |
| Turkey         | 4.53 | 4.35 | 4.40 | 4.48 | 4.58 | 4.83 | 4.71 | 4.62 | 4.85 | 4.89 | 4.68 |
| United Kingdom | 2.22 | 2.19 | 2.16 | 2.16 | 2.10 | 2.06 | 2.02 | 1.95 | 1.91 | 1.81 | 1.79 |
| United States  | 3.01 | 2.88 | 2.84 | 2.87 | 2.91 | 2.94 | 2.86 | 2.87 | 2.82 | 2.80 | 2.71 |

\* Data for Spain are from national source; other data come from the replies to the annual defense planning questionnaire.

Source: Report by NATO's Defense Planning Committee, December 1988, page 17.

Appendix E

Military and Civilian personnel plus Reserve  
Mobilization as a % of Labour Force\*

|                | 1987<br>(Actual) | 1988<br>(Projections) |
|----------------|------------------|-----------------------|
| Belgium        | 5.28**           | 5.26                  |
| Canada         | 1.16             | 1.20                  |
| Denmark        | 3.97**           | 3.96                  |
| Germany        | 5.33**           | 5.33                  |
| Greece         | 11.35**          | 11.35                 |
| Italy          | 2.90**           | 2.89                  |
| Luxembourg***  | 0.83             | 0.82                  |
| Netherlands    | 4.98**           | 4.97                  |
| Norway         | 11.22**          | 11.19                 |
| Portugal       | 6.09**           | 6.12                  |
| Spain          | 5.34**           | 5.39                  |
| Turkey         | 5.31**           | 5.24                  |
| United Kingdom | 2.36             | 2.33                  |
| United States  | 3.75             | 3.69                  |
| (NATO average) | (4.02)           | (3.99)                |

\* Includes active military manpower, civilian personnel and mobilized reserves to attain wartime authorized strength.

\*\* Indicates countries with conscription.

\*\*\* Some 30% of Luxembourg's labour force is comprised of foreign nationals.

Source: Report by NATO's Defense Planning Committee,  
December 1988, page 18

Appendix F

| 1988 ACE FORCE GOAL IMPLEMENTATION |                     |                 |
|------------------------------------|---------------------|-----------------|
|                                    | OVERALL PERFORMANCE | CDI PERFORMANCE |
| Belgium                            | 56%                 | 61%             |
| Canada                             | 70%                 | 70%             |
| Denmark                            | 59%                 | 63%             |
| Germany                            | 91%                 | 95%             |
| Greece                             | 63%                 | 66%             |
| Italy                              | 74%                 | 74%             |
| Luxembourg                         | 28%                 | 36%             |
| Netherlands                        | 75%                 | 74%             |
| Norway                             | 78%                 | 73%             |
| Portugal                           | 67%                 | 44%             |
| Turkey                             | 66%                 | 69%             |
| United Kingdom                     | 90%                 | 98%             |
| United States                      | 89%                 | 98%             |

Source: Report by NATO's Defense Planning Committee,  
December 1988, page 24

# Appendix G

## COMMON FUNDING (% shares)

| Country | Infrastructure Shares<br>(Police Group 36-41) | Civil Budget<br>15 countries | International Military Budget |              | NAEW Force                  |                    |       | NAMSO |       |
|---------|---|------------------------------|-------------------------------|--------------|-----------------------------|--------------------|-------|-------|-------|
|         |   |                              | 15 countries                  | 14 countries | E-3A<br>12 countries<br>(1) | HQ<br>13 countries | HQ    | RSCC  |       |
|         | 14 countries                                  | 15 countries                 |                               |              |                             |                    |       |       |       |
| BE      | 4.59  | 3.96                         | 2.76                          | 2.95         | 3.56                        | 3.38               | 2.66  | 2.76  | 3.45  |
| CA      | 6.43  | 5.56                         | 5.60                          | 5.80         | 6.99                        | 9.42               | 7.40  | 5.60  | 7.00  |
| DE      | 3.77  | 3.26                         | 1.59                          | 1.74         | 2.10                        | 2.00               | 1.57  | 1.59  | 1.98  |
| FR (2)  | -   | 13.34                        | 16.50                         | 17.10        | -                           | -                  | -     | 16.51 | -     |
| GE      | 26.75   | 23.16                        | 15.54                         | 16.10        | 19.42                       | 28.13              | 22.10 | 15.54 | 19.43 |
| GR      | 0.79  | 0.69                         | 0.38                          | 0.39         | 0.47                        | 0.61               | 0.48  | 0.38  | 0.48  |
| IC      | -   | -                            | 0.05                          | 0.05         | 0.06                        | -                  | -     | -     | -     |
| IT      | 8.07  | 6.98                         | 5.75                          | 6.12         | 7.38                        | 7.26               | 5.70  | 5.76  | 7.20  |
| LU      | 0.22  | 0.19                         | 0.08                          | 0.09         | 0.11                        | 0.10               | 0.08  | 0.09  | 0.11  |
| NL      | 5.19  | 4.49                         | 2.75                          | 2.94         | 3.55                        | 3.74               | 2.94  | 2.75  | 3.44  |
| NO      | 3.18  | 2.75                         | 1.11                          | 1.20         | 1.45                        | 1.45               | 1.14  | 1.11  | 1.39  |
| PO      | 0.20  | 0.20                         | 0.63                          | 0.65         | 0.78                        | 0.69               | 0.55  | 0.63  | 0.79  |
| SP (3)  | -   | -                            | 3.50                          | -            | -                           | -                  | -     | 3.50  | -     |
| TU      | 0.81  | 0.81                         | 1.59                          | 1.65         | 1.99                        | 1.62               | 1.27  | 1.59  | 1.99  |
| UK      | 12.19   | 10.54                        | 18.82                         | 18.22        | 21.98                       | -                  | 21.45 | 18.83 | 23.54 |
| US      | 27.82   | 24.06                        | 23.35                         | 25.00        | 30.15                       | 41.52              | 32.62 | 23.36 | 29.20 |

(1) UK has separate force of seven aircraft.

(2) France does not participate in the integrated military structure.

(2) Spain's contribution to the International Military Budget and the Infrastructure Programme is under consideration.

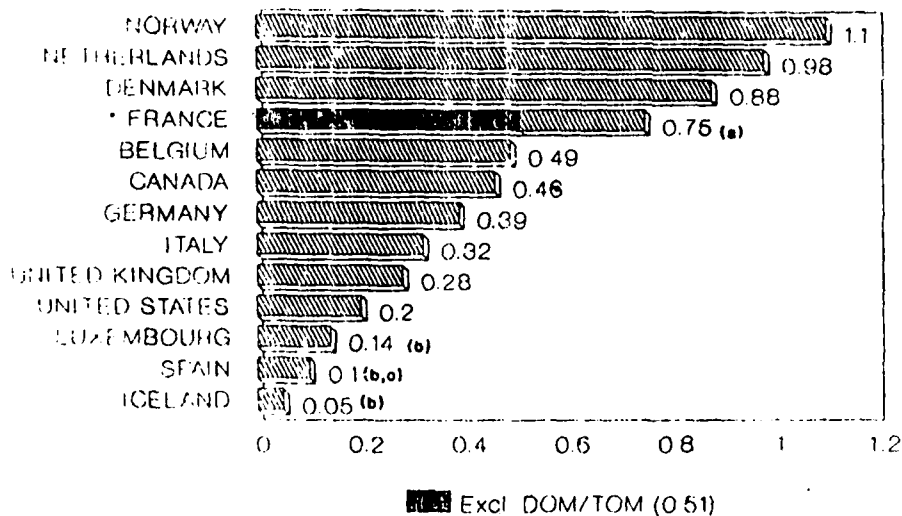
Table prepared by NATO's Defense Planning Committee.  
Revised 1979 page 3



## Appendix H

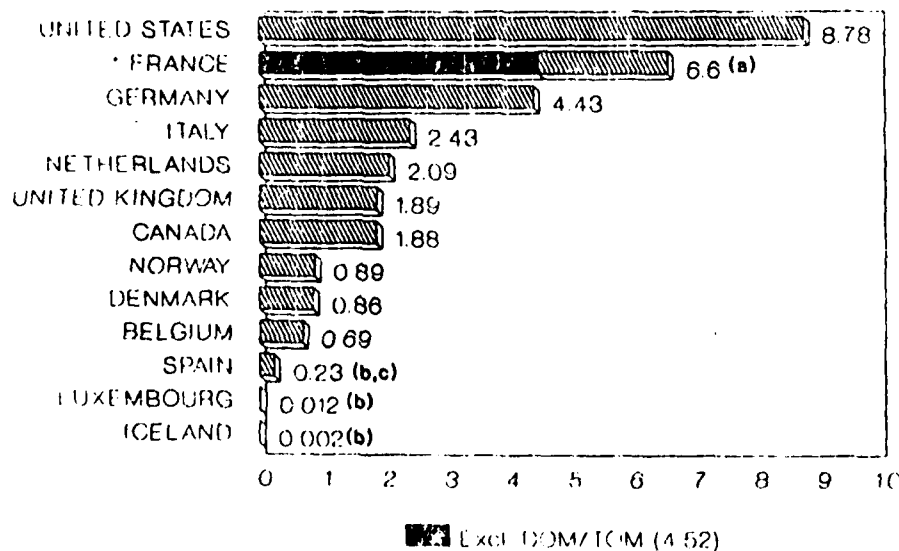
### FOREIGN AID (1987 figures)

#### AS % OF GNP



(a) including DOM/TOM (Departments d'Outre-Mer/Territorios d'Outre-Mer)  
 (b) National Sources  
 (c) 1985

#### US DOLLARS (Billions)



\* France does not participate in the  
 integrated Military Structure of  
 the Alliance

Source: Report by NATO's Defense Planning Committee,  
 December 1988, page 40.

## Appendix I

### ABBREVIATIONS

|           |   |
|-----------|---|
| ACE       | Allied Command Europe   |
| BE        | Belgium   |
| CA        | Canada  |
| CDI       | Conventional Defense Improvement<br>Program                           |
| CEP       | Civil Emergency Planning  |
| DE        | Denmark   |
| DPC       | Defense Planning Committee  |
| DRC       | Defense Review Committee  |
| E-3A      | Aircraft of the Airborne Early<br>Warning System                      |
| EEC       | European Economic Community   |
| EUROGROUP | Acronym used for Informal Group<br>of NATO European Defense Ministers |
| EWG       | Executive Working Group   |
| FR        | France  |
| GE        | Germany   |
| GDP       | Gross Domestic Product  |
| GNP       | Gross National Product  |
| GR        | Greece  |
| IC        | Iceland   |
| IT        | Italy   |
| LTDG      | Long Term Defense Program   |
| LU        | Luxembourg  |
| NAEW      | NATO Airborne Early Warning   |
| NAMSO     | NATO Maintenance and Supply<br>Organization                           |
| NATO      | North Atlantic Treaty Organization                                    |
| NL        | The Netherlands   |
| NO        | Norway  |
| PO        | Portugal  |
| RSCC      | Reconnaissance System Computer<br>Controlled                          |
| SACEUR    | Supreme Allied Commander Europe                                       |
| SP        | Spain   |
| TU        | Turkey  |
| U.K.      | United Kingdom  |
| U.S.      | United States   |